Lead-free Green

A product Line of Diodes Incorporated<br>PRODUCT BRIEF

## PI3EQX16621

## 16Gbps, 4-Channels PCle Mux ReDriver

## Features

$\rightarrow$ 16Gbps Serial Link with Linear Equalizer
$\rightarrow$ Full Compliancy to PCle Gen 1 to Gen 4 Standard
$\rightarrow$ Supporting Four Differential Channels
$\rightarrow 2$ to 1 Mux
$\rightarrow$ Adjustable Output Linear Swing, Flat Gain, and Equalization via Pin Control
$\rightarrow 100 \Omega$ Differential CML I/Os
$\rightarrow$ Automatic Receiver Detect
$\rightarrow$ Rate and Coding Agnostic
$\rightarrow$ Transparent to Link Training
$\rightarrow$ Supply Voltage 3.3V
$\rightarrow$ Temperature Range: $0^{\circ} \mathrm{C}$ to $70^{\circ} \mathrm{C}$
$\rightarrow$ Totally Lead-Free \& Fully RoHS Compliant (Notes $1 \& 2$ )
$\rightarrow$ Halogen and Antimony Free. "Green" Device (Note 3)
$\rightarrow$ Packaging (Pb-free \& Green):

- 40-Contact, ZLD40 (TQFN)


## Block Diagram



## Description

The PI3EQX16621 is a low-power, high-performance 16 Gbps 4-channel Mux ReDriver ${ }^{\mathrm{mm}}$.

## The 4-Channel Mux ReDriver

The ReDriver provides programmable equalization, swing, and flat gain to optimize performance over a variety of physical mediums by reducing intersymbol interference. The ReDriver supports two $100 \Omega$ differential CML data I/Os between the Protocol ASIC to a switch fabric, over cable, or to extend the signals across other distant data pathways on the user's platform.
The integrated equalization circuitry provides flexibility with signal integrity of the signal before the ReDriver. A low-level input signal detection and output squelch function is provided for each channel. Each channel operates fully independently. The channels' input signal level determines whether the output is active.

The ReDriver also includes an adaptive power management feature to maximize battery life for power-sensitive consumer devices.

## Applications

High End Motherboard
$\rightarrow$ Workstation

## Ordering Information

| Part Number | Package | Description |
| :---: | :---: | :---: |
| PI3EQX16621ZLDEX | ZLD | $40-\mathrm{Pin}, 3 \mathrm{~mm} \times 6 \mathrm{~mm}$ (TQFN) |

## Notes:

1. No purposely added lead. Fully EU Directive 2002/95/EC (RoHS), 2011/65/EU (RoHS 2) \& 2015/863/EU (RoHS 3) compliant.
2. See https://www.diodes.com/quality/lead-free/ for more information about Diodes Incorporated's definitions of Halogen- and Antimony-free, "Green" and Lead-free.
3. Halogen- and Antimony-free "Green" products are defined as those which contain <900ppm bromine, $<900 \mathrm{ppm}$ chlorine ( $<1500 \mathrm{ppm}$ total $\mathrm{Br}+\mathrm{Cl}$ ) and $<1000 \mathrm{ppm}$ antimony compounds.
4. $\mathrm{E}=\mathrm{Pb}$-free and Green
5. X suffix $=$ Tape/Reel

## X-ON Electronics

Largest Supplier of Electrical and Electronic Components
Click to view similar products for Interface - Signal Buffers, Repeaters category:
Click to view products by Diodes Incorporated manufacturer:
Other Similar products are found below :
PI6ULS5V9509UEX PI3HDMI101-BZHEX PI3EQX12904AZHEX PI6ULS5V9306WEX PI3EQX1004EZTFEX PI6ULS5V9509WEX 48705-3001R2 48705-6501R2 DS280BR820ZBLT PCA9617ADPJ PI6ULS5V9515AWEX PI3HDMI101ZHE LTC4315CDE\#PBF LTC4300-1CMS8\#PBF DS110DF1610FB/NOPB LTC4301LCDD\#PBF LTC4303IDD\#PBF LTC4315IMS\#TRPBF LTC4304IMS\#PBF DS280DF810ABVT LTC4315IDE\#PBF LTC4300-1IMS8\#PBF LTC4313IMS8-3\#TRPBF LTC4300-2IMS8\#PBF LTC4300A-1CMS8\#PBF PCA9515AD, 118 LTC4307CMS8-1\#TRPBF LTC4304CDD\#PBF PI3EQX1002B1ZLEX LTC4301LIMS8 LTC4313IDD-3\#TRPBF LTC4309IGN\#PBF LTC4309CGN\#PBF MAX9169EUE+ LTC4302IMS-2\#PBF LTC4302CMS-1\#PBF PI6ULS5V9306UEX LTC4300A1CMS8\#TRPBF P82B715TD,112 PCA9507DP,118 PCA9509DP,118 PCA9509GM,125 PCA9515ADP,118 PCA9517AD,118 PCA9517ADP,118 PCA9517DP,118 P82B715TD,118 PI6ULS5V9511AWEX PI1EQX512AXUAEX PI2EQX502TZHEX

